DESCRIPTION

This work shall consist of furnishing and installing Type 8502 asphalt coated, self-adhering glass fibre strand reinforcement mesh at the locations and as detailed in the contract plans.

MATERIALS

Material shall be Glasgrid as manufactured by Bay Mills Limited, 39 Seapark Drive, P.O. Box 728, Catharines, Ontario, Canada, or approved equal. Type 8502 reinforcement mesh shall consist of glass fibre strands coated with modified asphalt with an adhesive backing on one side. The Type 8502 material shall be furnished in 60m Long, 1.5m Wide rolls. In addition, the reinforcement mesh shall have the following physical characteristics and mechanical properties.

Physical Characteristics

Grid Size	12.5mm x 12.5mm
Weight	560 g/m²
Color	Black

Mechanical Properties

Tensile Strength	200kN/m x 100 kN/m, Component Strand Strengths
Modulus of Elasticity	69,000,000 kPa
Elongation at Break	4% max.
Melting Point	Above 218° C

CONSTRUCTION DETAILS

Prior to use, reinforcement mesh rolls shall be kept indoors and stored vertically (on end) under dry covered conditions free from dust to prevent roll distortion and contamination.

Before the reinforcement mesh is laid, the existing pavement surface shall be prepared and cleaned by air blast method at all crack locations as shown on the plans. If traffic, including construction traffic is permitted on the existing pavement prior to reinforcement mesh placement, the surface shall be mechanically swept or recleaned by air blast method to remove any accumulation of dirt, dust, or other debris present. Tack coating the existing pavement at joint locations will not be permitted. Reinforcement mesh shall not be placed if the surface temperature of the truing and leveling course is below +10° C or above 46° C if the surface of the existing pavement is wet.

The existing pavement surface must be properly prepared in advance of mesh installation by repairing or resurfacing any defective pavement as ordered by the ENGINEER. The existing pavement surface must be clean, smooth and free of surface deformities, settlement or excessive surface cracking. A truing and leveling course shall be installed over such areas if deemed necessary by the ENGINEER prior to mesh installation. Mesh shall not be installed directly over any milled surfaces.

The reinforcement mesh shall be laid out by hand or by mechanical means approved by the ENGINEER, taking care to place the adhesive backing side face down on the pavement. Sufficient tension shall be applied to eliminate ripples. Should ripples occur, they shall be remove by pulling the grid tight or, in extreme cases (i.e. tight radii), by cutting the grid and laying it flat. Workmen handling the mesh shall wear gloves to protect their hands from abrasions and/or cuts.

Transverse joints occurring at the end and beginning of each reinforcement mesh roll shall be overlapped a minimum of 150mm in the direction of paving.

Once laid, the reinforcement mesh shall be rolled in accordance with manufacturer's recommendations. In no instance, however, shall steel wheeled or vibratory rollers be used. The rolling shall continue until the adhesive is activated and the mesh is bonded to the existing pavement. Generally, this can be accomplished in one or two roller passes. During rolling operations, roller tires shall be kept clean to the satisfaction of the ENGINEER. Reinforcement mesh shall be laid and rolled over ironworks (i.e. manhole covers, drainage grates, etc.). Once the mesh has been rolled, the portions of the mats covering the iron works shall be removed by cutting the reinforcement mesh with a utility knife or other similar tool.

Construction and emergency vehicles will be allowed to run on the reinforcement mesh after rolling. However, any damaged or debonded section of mesh resulting from these vehicles, as determined by the ENGINEER, shall be immediately replaced with new mat sections taking care to place the adhesive backing down and to underlap the mesh already in place. Transverse joints shall be underlapped a minimum of 150mm. Longitudinal joints shall be underlapped a minimum of 50mm. As before, replacement mesh sections shall be rolled in accordance with manufacturer's recommendations. Mesh shall be rolled until the adhesive is activated and the replacement mesh section is bonded to the existing pavement. Any dirt, dust or other contaminants deposited on the mesh covered pavement surface shall be removed by air blasting the surface. No additional payment will be made to replace section of mesh damaged by construction or emergency traffic or to sweep or air blast the surface, removing contaminates deposited by such traffic.

The CONTRACTOR shall schedule his work so that any reinforcement mesh placed in a given work day is covered with a minimum of 40mm of compacted asphalt concrete course before the end of that working day.

METHOD OF MEASUREMENT

The quantity to be measured under these items shall be the number of meters of 1.5 meter wide reinforcement mesh installed excluding transverse and longitudinal laps. No deduction shall be made for reinforcement mesh removed around the perimeter of ironworks.

BASIS OF PAYMENT

The unit bid price per linear meter shall include the cost of furnishing all labor, materials and equipment to complete the work including mesh removal around the perimeter of ironworks and sweeping or air blasting the pavement surface prior to reinforcement mesh

installation.

Payment will be made under:

Item No.	**Item**	**Pay Unit**
490.12M	Pavement Joint Glass Fibre Strand Reinforcement Mesh	M